Length Score Score Sig. Frame

1. US-09-359-756-1 Sequence 1, Application US 1564 1495 1495 2.04 1

Description

Sequence Name

The list of other best scores is:

FastDB - Fast Pairwise Comparison of Sequences Release 5.4

> 0 < 0 | O IntelliGenetics > 0 <

Results file 697898_x_6168950.res made by spaula on Thu 20 Feb 103 17:08:30-PST.

Query sequence being compared:US-09-697-898-3 (1-1495) Number of sequences searched: Number of scores above cutoff:

Results of the initial comparison of US-09-697-898-3 (1-1495) with: File : 6168950.seq

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																		*	1 1 1 1 1 1		1495	
																					1329	
																			1 1 1 1 1	=	1163	
																					766	
																			1 1 1 1 1 1 1		831	
Spirites.									,										1	_	664	
																			+	_	498	
entered former of the entered between the second of the entered of																				_	332	
j . 2																			111111	-	166	
100-		-05	1	ı	ı	ı	1	,	10-	1	•	ب *	•		1	1	1	1	0		SCORE 0	
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		500
PARAMETERS	K-tuple	Joining penalty Window size
PARA	Unitary	1.00 1.00
	Similarity matrix	Iransiation Frame Mismatch penalty Gap penalty

SEARCH STATISTICS .00.00 0.00 0.00 rismaccon powers Gap penalty Gap size penalty Cutoff score Randomization group

Standard Deviation 605.68 Total Elapsed Median 10 CPU 00:00:00:00 Mean 258 Scores: rimes:

9379 6 6 Number of residues: Number of sequences searched: Number of scores above cutoff: The scores below are sorted by initial score. Significance is calculated based on initial score.

A 100% similar sequence to the query sequence was found:

640

580

Init. Opt.
16 10 10 10 10 10 10 10
1. US-09-697-898-3 (1-1495) US-09-359-756-1 Sequence 1, Application US/09359756
Initial Score = 1495 Optimized Score = 1495 Significance = 2.04 Residue Identity = 100% Matches = 1495 Mismatches = 0 Gaps = 0 Conservative Substitutions = 0 Translation Frame = 1
X 10 50 60 70 PSPEAGGGGGALKASSARAAAGILKEAGSGGREKADWRRQLKKVRSYELDQLPEQPPELAASPPASSTSP
80 SPEPADAAGSGTGFQPVAVPPFHGAASRRGAHLTESVAAPDSGASSPAAAERGEKRAPAAERPAARPAGRE
150 160 210 MENKETLKGLHKADDR PEERMIREKLKATCMPAWKHEWLERRNRGPVVVKPI PVKGDGSEMHLAAESPGE
220 270 280 VOASAASPASKGRRSPSPGNSPGRTVKSESPGVRRKRVSPVPFOSGRIIPPRRAESPDGFSPYSEETNRR
290 300 310 350 360 360 0 360
370 LKONFEVESLFOKYHSRRSSRIKAPSRNTIQKFVSRMSNSHTLSSSSTSTSSSENSIKDEEEOMCPICLIGML
440 500 DEESLIVCEDGCRNKIHHHCMSIWAEECRRNREPLICPLCRSKWRSHDFYSHELSSEVDSPSISAAQQOTV DEESLIVCEDGCRNKIHHHCMSIWAEECRRNREPLICPLCRSKWRSHDFYSHELSSEVDSPSIRAAQQOTV DEESLIVCEDGCRNKIHHCMSIWAEECRRNREPLICPLCRSKWRSHPELSSEVDSPSSIRAAQQOTV 440 450 500
\$10

Thu Feb

US-09-697-898-3 (1-1495) US-09-359-756-1 Sequence 1, Application US/09359756

XXLVGNHIDIYGHDATEQLXTRPVGNPYLSMXL 1520 1530

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X
PSPEAGGGG--GALKASSARAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LTRRFVSSGLYGEKPSGEGALRGGVILPLXKGTGETLFLLTPGDSDFTVRPDGELPGEGRRPLEAGEAALA
1280 X 1330 1340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SĽCDLMĠS-CQBKDCVGLWKĽVKPHLPQPLLETQĽLSDSFQIHLLKLGLVLPPQAĽÁYFSFPTIRÁSRLAYR
1330 1330 1340
                                                                                                                                                                                                                                                                                                           70 80 120
--ŞTŞP-SPEPADAAGSGTGFQPVAVPPHGAASRRG-AHLTESVAAP-------DŞGASSRA-AAEPG
                                                                                                                                                                                                                                                                                                                                                            LPŠVSPXPRPUDDHPŠCATLXEFLYSPSH---DŘŘGPLQETARRRÁPASPRARPLRDŠRRRCPÁPPPTRXG
1400 1410 1410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GRRA-GWELRGAAAPPQAGSRSHSPL------RP-----RAPATGKSRRPA-----VRRQGRAAAQA
1470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         190 200 210 250 250 - 240 - 250 - 250 - 250 - 250 - 290VVVKPIPVKGDGSEMNHILAAESPGEVQASAASPASGRRRSPSPGURSPSGRTVKSESPGVRRKRVSPVPF
                                                                                                                                                                                                                                                                                                                                                                                                               130 140 150 160 170 180 EKRAPAAPAAPAGREMERRIKREKLKAŢ---CWĘĄWKHEWLERRINRR----
                                                                                            X
PSPEAGGGGGALKASSARAAAA
                                                                                                                                             LLQSGKSXALSAAVSTVWPASLCXHGGLFPQGYMVRSHLVKGLFGVVXFCHŠEKÅ---LĠKĹFFŜLLLEILI
1260 X 1310 X 1320
                                                                                                                                                                                                       30 40 50
GLIREAGSGGRERADWRRRQLRK---VRSVELDQL------PEQPLFIJA-ASPP---AS----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -0.40
133
0
         Significance = -0.40
Mismatches = 130
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Significance = Mismatches = =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (1-1495)
Sequence 1, Application US/09359756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Optimized Score = 56
Matches = 72
Conservative Substitutions
16 Optimized Score = 53
23% Matches = 81
139 Conservative Substitutions
4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   268
448
69
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GTFCIHLLFVMLRVFQLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-697-898-3
US-09-359-756-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Initial Score =
Residue Identity =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
Translation Frame=
           Initial Score = Residue Identity =
                                               Gaps
Translation Frame=
```

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850 850 860 870 870 880 -VEIAEAIÇ-----FP---TTIWKFQRTVP----LQRQQHNSFCRHL----FP---TTIWKFQRTVP----L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RGHFXÈTGÖDFSRTFXFNNNNNNRATKANGSNKRÖTPQŠVPELLSFISSFPINVSSLVNPFFFYPICTSW
910
910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 XYKXTGRÁLKKKHDÝXSEÓXFQMXXQLMLEGÓXXXLLLYÖXRDSVHPSRGEMQIRCQYRAĞĹQYXGPSXSIY
1060 1100 1110
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-----TPSSSTPSVPAG-----TATDVSK-HRLQG------FIPC---RIPSASP-----QTQRK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AFKXYNSNFXVRŠCCÞVSKKČKKXXYLQRXCESKŠKVQREDĠSKRRRFSFSNČHGNVSVŠGŠPPHSSSAAGKK
1130 1140 1150 1150
                                                                                                                                                                                                                                                               490 520 530 540 ELSSPVDSPSSL-RAAQQQTVQQQPLA-----GSR-RNQESNFNLTHYGTQ------QIPPAYKDLAEPW
                                                                                                                                                                                                                                                                                                                                                              Ė-ŠREQFXPYŠLMNSÅNPSCLQRFSXAMDSGVMNGTRULIFXKLECERDGPQASFPXCQMGPAVGKWGEHW
520
520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SSO 590
IQVFGMELVGCLFSRNWNVREMALRR----LSHDV-----SGALLLANGESTGNSGGSSSFSG-G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KFWQQQWKQPEWGHQWVFPDQYLRRCQGGMLQRSVNGLCXPCLQSVRCCFKNIES--HAGIYSLPQFSGKN
590 600 610 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600 610 620 620 650 650 AŞSŞÇTŞISGDVVEAÇ---CRDIŞVXKVYVAALKTLRAMLVYTPÇ-----HSLAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OŻŚETŚPAŚCRHHPSOMCRCOXPHKŚAŮHINTVOTVORPSRRÝGSWORNÍKSMIHWÝWMČXLCLKLYSWKPN
660 670 680 680 690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660 690 700 710 RIK-LORLLOP-----VV---DILVKCADANSRTSQLSISTLLELCKGQAGELAYGREILKAGSIGIGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             XİKQLARTSWPELSYRXTÜVGISCXİL-----SSYCQYXCFT-SXACXNÖVXEAAVELNLCFA----VH
730 740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720 730 730 740 750 760 770 789 VDYVINCILGNQTESNNWQELLGRLCLIDRLEFPAEFY--PHIVSTDVSQAEPVEIRYKKLLSLLFFALQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          XXFFLN---GWQT----FVKDL-------LEFCKNGYYSTPCVFKTVRNÅE----CFQCFHGLHQDA---790 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           790 800 810 840 SIDNSHSMYGKLSRRIYLSSARMYTT-----VPHVFSKLLEMLSVSS--VSTHFTRMRRLMAYADE---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SPEDGLCRXGGNCRSHPVGRRRHFITITIQQLLQASVPNNYLETITBNSSPXVHSPFRENWKRIMCYKIECQF
840 850 850 860 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HÖNRCİXAXTISĞIHSİQNİFCISSNIAQVESTIPQĞİĞXXQRLRXTFPSIYSVKTİALQXHIQAKAİSTYPR
980 1030 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     930
-----SSSTTTTTTEQPKPM-----VQTKGRPHSQCLNSSPLS------HHSQLMFPALS----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   430 440 450 450 450 460 470 480 LGMLDEESLITVCEDGCR--NKLHHHCMS---IWAE------ECRRNREPLICPLCRSKWRSHDFYSH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         920
ECTVHLEKTGKG---LCAT-------KLS------ASSEDISERLA-----RISVGP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WRRYHHYSTGYTRÜĞTRTYQSKİTVXRRHXMAERĞTDRÊMĞIFFLLSGĞR--CĞMMNFNĞ----CXİGDL-
1200 1210
                                                                                                                                                                -----PLHV-NLGRRVXKKXRTFNMSPLXIXVEISXFLQPRVVKSCGFPFFFQSCTAANRTAAAFGWITK
420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          250 250 290 290 TVKSESPGVP----RKRVSPVPFQS----GRITPPRRA-PSPDGFSPYSPEETNRR-----VNKYWRA-R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HTTPKŚPFTRWILTIXPXGNKPPCXÓŚDAGCTVILTAADRÁXIFPD------WRRQPRQXIPGVYWĄSE
270 310 320
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330 / 340 340
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--NFEVESLFQKYHSRRSŞRIKAPSRNTI----ÇKFVSRMSNSHTLSSSSTSTSSŞENSIKDEBEÇMCPICL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          190 200 210 220 240 WLERR------NRRGP-VVVKPIPVKGDGSEMNHLAAESPGEVQASAASPASKGRRSPSPGNSPSGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PSXRRWIXNESLSSXVSRRGFGRCGFTSFORPTQSFSWQLPIRSHSEIRIS----RSKRKSFPSAFSBWQN
200 210 220 220 230 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300 310 350 360 250NCYRVFIGPONCSCAHGTFCIHLLFVMLRVFQLEPSDPMLMRKTLK-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50 60 110 110 -- RKVRSVELDÇLPEQPLFLAASPPASSTSPSPBPADAAGSGTGFQPVAVPPPHGAASRRGAHLTESVAAPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120 130 170 180 sgasspaaabegekrapaaepspaaapag----remenketlkgihkoidkpeermireklkatcmpawkhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          XHHPB'VCFTHVK-----FSYİVI IXYFYİXFRKQHKGXRGTDVSYLLVGHAXXRKSYSVXRRLQBQAAP---
WTSPGDSAAXXFISDPSPLTGIGFTTTGPRLFLLSNHS--CFQAGIQVAFSFSLIIRSSGRSSSILCNPLRVS
1350 1360 1370 1380
                                                                                                                                                                                             LFSISRPAGAA-AGDGSAAGARFSPGSAAAGLEAPL--SGAATDSVRWAPRRLAAPWGGGTATGWKPVPLPA
                                                                                                                                                                                                                                                                                                           140 150 200 200 210 APAGREMENKETLKGLHKMDDRPEERMIREKLKATCMPAWKHEWLERRRRGPVVVKPIPVKGDGSEMMHLA
                                                                                                                                                                                                                                                                                                                                                                                                  -----SGDGBVEEAGGEAARKSGCSGSWSSSTL-RTLR-----SGDGBVEEAGGEAARKSGCSGSWSSSTL-RTLR------SGDGBVEEAGGEAARKSGCSGSWSSSTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          X 10 20 30 40 PSPE-----AGGGGGALKASSARAAAGLLREAGSGGRERADWRRRQL-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  epxgrrrrrspogeorargcrgtaaggorgpragglaaaaaosaecgagpaaxaaalpcrltaglldfpv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGARGRSGEWDRLP--ACGCAAAP--RSROPARRPPYRVGGAG-QRRLESRSGRA---RGEAGARRRAVSC
80 130 130
                                                                                                      80 90 100 110 120 130
----PEPADAAGSGTGFQPVAVPPPHGAASRRGAHLTESVAAPDS--GASSPAAABPGEKRAPAAEPSP-AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         220 230 230 240 250 260 270 AESPGEVQASAASPASKGR,----RSPSPPGRIVKSESPGVRRKRVSPVPFQSGRITPPRRAPSPDGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Optimized Score = 246 Significance = -0.41
Matches = 374 Mismatches = 846
Conservative Substitutions = 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-697-898-3 (1-1495)
US-09-359-756-1 Sequence 1, Application US/09359756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ARSRPPLPASRSŠPAAARALLALRAP-PPPPASG
130
1540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  515
515
30 48 90
30 48 90
```

Initial Score = Residue Identity = Gaps Franslation Frame=

280 290 SPYSPEETNRRVN

140

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130 170 180
EKR---APAA-----EPSPAAAPAPGREMENKETLKGLHKMDDRPEERMIREKLKATCMPAWKHEMLERRNR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HRPŠPISPPQPFVLPGWHTGCLQFLPDHSFLWTIIHLVQP---PPSFFILHLTTGGGRCRRRLGGGRPLLPG
1380 1380 1430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LGRCGTRGAAVRRRHRLGKVGAAÞAG-------GSVGRRHRHBAGBAGPTÞ-RCVRGLRRRRGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1390 1400 1410 1420 1430 1440 1450 GEFQGQLLGTIAFMAPEVLRGQQYGRSCDVWSVGCAIIEMACAKPPWNAEKHSNHLALIFKIASATTAPSIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TLKÄHWGNSFSPYSWRFXFHCATXWGVARRRIAÅAFGSWXSRTCLDL--SWRLSCXVIHFRSIŠFNWDWFYH
1310 1320 1330 1330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
--PŞP----EPADAAGSGTG---FQP------VAVPPHGAAŞRRGAHLTESVAAPDSGASSPAAEPĢ
1070 1080 1090 1100 1100 SSSKCDDSFGLSSNSSNCCYTSDETVFTPVE-EKCRLDV-----NTELNS------SIEDLLE
                                                                                                                                                                                     1130 1140 1150 1160 1170 1190 ASMPSSDTTVTFKSEVALLSPERNENDDTYKDDVNHNQRÇKERVAEA--EBEBEALAIANAMŞAŞQVALFIVPQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1250 1260 1270 1280 1290 1300 1310 QAQDVGTGTLMAVKQVTYVRNTSSEQEEVVEALREEIRMGSHLNHPNIIRMLGATCEKSNYNLFIERMAGGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----LSYY-------MYANTIDLER-------NRMLNKRKK-----TCGEPHXYLPXCHXTAMNEAS-----
1490 1500 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   X 10 20
PSPEAGGGGGALKASSARAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAAVLRPNKHPVFIVWAVSSNQERVRPYLLQXVQSGPHHFVNTAVCFLRAIWXEÀIWXRG----8SGWCDSÅ
1240 X 1290 X 1290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30
GILREAG---SGGRER-----ADWRRRQLRKVRSVELDQLPEQPLFLAASPPAS-----STS-----
                                                                               -CQKHIFXARRSSKSTRTRDKNDE----PSESSKHHXDVGSHVXEBQLQSLHXMDGRGIGGSFAEXÍMSLQR
1260 1270 1280 1320
                                                                                                                                                                                                                                                                           .ISSYXLHXTVTPWTPV---SPXK-------PNHSQRCQRCQFANXQHWSETKNCRFWSCSQVGIKRNWC
1330 1340 1340
                                                                                                                                                                                                                                                                                                                                                                        1210 1210 1210 1220 1230 1230 1240 IQVENGEDIIIJQQDTPETLPGHTKAKQPYRE---DTEWLKGQQOIGL------GARFSÇ------
                                                                                                                                                                                                                                                                                                                                                                                                                                                              RRV----SGTITGbNCIYGTXGTKRSTVWKBLXCMECWLCYYRNGLCKTTMBCRKTLQSSCFDIXDCXCNY
1390 1440 1440 1450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9 Optimized Score = 50 Significance = -0.41
22% Matches = 76 Mismatches = 153
116 Conservative Substitutions = 0
5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5. US-09-697-898-3 (1-1495)
US-09-359-756-1 Sequence 1, Application US/09359756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1460 1470 1480 1490
SHLSPGLRDVALRCLELQPQDRPPSRELLKHPVFRTTW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Initial Score = Residue Identity = Gaps
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370 380 390 400 410 420 .-----EVESLFQKYHSR--RSSRIKAPSRNTIQKFYSRMSNSHTLASSSTATSSSENSIKDEFEQMC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----XYVPFVDLSGDLMISTÄTSC---QVUMIPLLPSELHSSKPYS--SSIWLDHEGIK
470 480 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60 100 110 120 PLFLAASP------PASSISPSPEPADAAGSGIGFQFVAVPPPHGAASRGAHLTESVAAPDSGASSFAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RLPRRRSPRTGRGVGPASSLWRCRRP-----TEPPAGAAPTLPSRWRRRTAAP----RVYGRP
70 80 110 110 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          130
EPG-EKRAPAAEPSPAAAPAGREMENKETLKGLHKMDDRPEBRMIREKLKATCWP----AWKHEWLERRNRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SPARSGRPPPSRLLQRPPPVVŘMRIKKLSKGCTRWMIVQRNĚXSGŘNXRQPVČQPGSTNGWKGBIGÉGLWWX
130 140 150 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        190 200 210 250 250 09VVVKPIPVKGDGSEMNHLAAES--PGEVQASAASPASKGRRSP---SPGNSPSGRIVKSESF-GVRRKRV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      260 290 300
SPVP-----FQSGRI------TPPRRAPSPDGFSPYSPEFTNRRVNKVMRARLYTLLQQIGPNSF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              430 440 450 460 470 480 490 PICLLGMLDEESLITVCEDGCRNKLHHHCMSIWAEECRRNREPLICPLCRSKWRSHDFYSHELSSPVDSPSSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   X 10 20 50
PSPEAGGGGGALKASSARAAAAGL-----LREAG--SG----GRERA---DWRRRQLRKVRSVELDQLPEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RALRQAABEBPSRRAATARIPEDCCGRRAAGAASGRTGGGSCAKCGVWSWTSCLSSRSSLPPHRRPP
X
X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     310 320 350 340 340 26----CAHGTFC-----ȚHLLFVWLR---VFQLEPSDPMLWRKTLKNF--
.90 200 210 210 220 230 240 250 RGPVTVKPIPVKGDGSEMNHLAAESPGEVQASAASPASKGRRSPSPGRNSPSGRTVKSESPGVRRKRVSPVPF
                                                                             ŔĠ-----GRRXGĠKĖERLĹ---RQLVQLHTPHFÅ----QLÞPÞPVRÞ-----LAAÞAAŘ-----1540
1530
                                                                                                                                                           270 280 X 300 310 320 330 QSGRITPPRRAPSPDGFSPYSPEETNRRVNKVNRARLYLLQQIGPNSFLIGGDSPDNKYRVFIGPQNCSCAH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŚHHĖBEPLHQMAŠHHŤALRKQTAVLTKXCGPOCTYCŠRXĠLTLSXLĖBĖTAQTINTGCLLGLRTAAVHMEHŠ
270 280 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COILIHCHHLVILHLVÖKTAXRMKRNRCVLFACWACLMKKV--LQCVKTAAGTSCTTTACQFGQKSVEE---
400
400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9 Optimized Score = 251 Significance = -0.41
20% Matches = 359 Mismatches = 911
456 Conservative Substitutions = 0
                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-697-898-3 (1-1495)
US-09-359-756-1 Sequence 1, Application US/09359756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  520
                                                                                                                                                                                                                                            OS-RGSR-ARARIEGSS----
1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Initial Score =
Residue Identity =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Translation Frame=
                                                                                                                                                                                                                                                                                                                                  340
GTFCIHLLFVMLR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  200
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1010 1020 1030 1040 1050 1060 1070 ---KFSLQFHRNCPENKDSDKLSPVFTQ---SRPLPSSSNIHRPKDSRPTPGNTSKQGDPSKNSMTLDLNSSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NADXMŠIOSSTPVLRTFLKHLCLQVIQOXLLSQKLLSCLKRLKMMIPT-----KMMXIIIKŠAKRRWKLKK
1110 1120 1130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1080 1090 1100 1110 1120 1130 1140 KCDDSFGLSSNSSNCZYTSDETVFTPVEEKÇRLDVNTELNSS----;EDLLEASMPSSDTTVTFKSEVAVLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  K-----KLXQLPWQC---ORLRXPSPXFLSCRL--KMEXISSLFNRIHQRLYQDIP-------KQNNR
1170 1170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1150 1150 1160 1170 1180 1190 1200 PEKAENDDTYKDDVN-----HNQKCKEKMEAEEEEALAIAMAMSASQVALPIVPQLQVE---NGEDIIIIQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IEKTLN----GXKYNRXALEHFLLVIRLKWMELELXWLLNRXLNMETHLLSKKKXXKHXEKRXEXXALXIIO
1220 1250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OPCOPLLILPHL--YQLALQOMSLSIDFRÖSFPAEYLLHLIKHSASFLYNSTETVIKTKTÖINFPOSILSOD
970 1010 1020
                                                            ŘÁ--ILÍLLIMELSKŠLLLTXIKLSHGFŘCLÉWŇ-SĽAAŘ-----FLETGMKÉRWPSGÝFPMMSVG---P
520 530 540 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       680 720 PANSRISQL-----SISTLLELCKGQAGELAVGREILKAGSIGI-GGVDYVLNCILGNQT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KAKQESWOJAEKYXKLDPLVLVVLIMSXIVFLETKLNO----TIGKNFLAAFVLXIDCGNNFLÄNFILILSV
710 710 710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LMFHKLSÍLKSGIŘSCCPSXPLÍCSPLIIPTQMLÁNŠ--PBGSTXVLÓBWLLQYPMCFQNCXKCXVFPVFPL
760 810 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TSPGCVAVXWLMQMŔWKLPKPSSWAXKTĹYNDNNTTAFAGICS--QQĹSGNHREQFPLSAQSIXRKĹEKDYV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  --SSVSTHFTRMRRRLMAYADEVELAEAIQLGVEDTLQRQQHN---SFCRHLFPT------TIWKP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LONXÝPVORÍFELŘDMPGFOXĎ-----LĽVQQQQQQQQQQQQSWFKQXADPÍTVSVXTPELYLIIPNXCF
0 910 910 950 950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10 890 930 930 910 920 930 930 920 930 920 930 930 930 930 930
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PCPPYTYTGGSH-LDLPQVIQVNREIPQXIAXHLIXTVVPNV--MTALAXAAIVVIAVIP-VTRQCSPQXRR
1040 1040 1050 1060 1060
   -----RRNQESNFNLTHYGTQQIPPAYKDLAEPW-IQVFGMELVGCLFSR
                                                                                                                                                                     560 610 620
NWNVREMALRRIGHDVSGALLLANGESTGNSGGSSGSSFSGGATSGSSGTS1SGDVVEAG-CSV--LANVÇA
                                                                                                                                                                                                                                                                                                                                                                                            630 640 670
DPVXKVYVAALKTLRAMLVYTPÇ--HSLA------ERIKLQRLLQP----VVDTJ--LVKC------A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ------TLLLXXHXEPCMYILLATVXRKESNFRDFSSQLXTPSXSNVQMPIAAQVSCPYQHCMNCA
640 650 660 670 680
                                                                                                                                                                                                                                                                                  CCWQMGRALEILGAAVEAA---RVGE--------PPVGLPRPVSQEMWWRHAAAFCQWSVLTLSTKC-
580 610 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      730 760
ESNNWQBLL--GRLCLIDRLLLEFP-----ABFYPHIVSTDVSQ-----
RAAQQQTVQQQPLAGS---
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Results of the initial comparison of US-09-359-756-1 (1-4693) with: File : US09697898mod.pep

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																						1332
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PARAMETERS

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	enalty .ze	SO	Standard Deviation 0.00	Total Elapsed 00:00:00.00	
K-tuple	Joining penalty Window size	SEARCH STATISTICS	Median 0	c	1495 1
Unitary	1.00	SES	Mean 1499	CPU 00:00:00	residues: seguences searched: scores above cutoff:
Similarity matrix Translation Frame	Mismatch penalty Gap penalty Gap size penalty Cutoff score Randomization group				
Similar: Translat	Mismatch per Gap penalty Gap size pena Cutoff score Randomization		Scores:	Times:	Number of Number of Number of

The scores below are sorted by initial score. Significance is calculated based on initial score.

A 100% identical sequence to the query sequence was not found.

The list of best scores is:

Name

> 0 < 0 | 0 IntelliGenetics > 0 <

		٠									
720	790 SIDNSHSM - - - - -	860 DTLQRQOH DTLQRQOH 860	TTTTEOPK TTTEOPK	ASPOTORKF ASPOTORKF 0	1080 KCDDSFGL KCDDSFGL	1150 SKAENDDTYKD EKAENDDTYKD 1150	1220 3HTKAKQPYREDT 3HTKAKQPYREDT 1220	90 HIRMLGAT H HIRMLGAT	O IDSTGORLR IDSTGORLR	1440 WNAEKHSNH WNAEKHSNH 1440	1510
710	770 PVEIRYKKLLSLLTFALQS:	850 YADEVELAEALQLGVEDTI XADEVELAEALQLGVEDTI 850	920 ISERLARISVGPSSSTITITI 	OGFIPCRIPSA QGFIPCRIPSA QGFIPCRIPSA 0 1000	0 1000 PGNTSKGGDPSRNSMT.DLASSSI 	1140 FKSEVAVLSPEKA FKSEVAVLSPEKA		1240 1250 1260 1270 1280 1290 1290 1290 1290 1290 1290 1290 129	1350 HENQIIHRDVKGANLLI HENQIIHRDVKGANLLI 1350	1430 SCALIEMACAKPPW SCALIEMACAKPPW 20	1500 PIIG
700	SOAE 2	840 RRRLMAYADEV RRRLMAYADEV 840	910 SASSEDISERLARI SASSEDISERLARI 910	980 STESVPAGTATDVSKHRLQGFIPCRIPSI 	1060 GNTSKQGDPSK GNTSKQGDPSK	MPSSDITVII 	1200 12 NGEDIIIIQODTPE NGEDIIIIQODTPE 1200 12	1270 COEEVVEALREE COEEVVEALREE 1270	4 —5	1410 20YGRSCDVWSVGC3 1	CLELOPODR PPSRELLKHPVFRITWXI
069 0	760 AEFYPHIVSTDV AEFYPHIVSTDV	00 RIYLSSARWTTVPHVPSKLLEMLSVSSVSTHFTRMRRELMAY.	900 LEKTGKGLCATKLSAS LEKTGKGLCATKLSAS 900	970 TPSSSTPSVPA TPSSSTPSVPA 970	1020 1030 1040 1050 FHRNCPENKLOSDKLSPVFTQSRPLPSSNIHRPKFSRPTPF	1120 NSSIEDLLER NSSIEDLLER	170 1180 1190 1190 1190 1190 120 120 120	1260 QVTYVRNTSSE QVTYVRNTSSE 1260	330 WVINYTEQLIRGLSY 	VLRG(1480 TELOPODRPP: TELOPODRPP: 1480
0 68	740 750 ELLGRLCLIDRLLLEFPAL	820 VFSKLLEMLS\ VFSKLLEMLS\ 820	890 /PLECTVHLEKTGI 	960 HSQLMFPALSTPSSS 	108RPLPSSN 108RPLPSSN 108RPLPSSN 104	1100 SDETVFTPVBEKCRLDVNTELI 	1180 \IAMAMSASQV \IAMAMSASQV 1180	1250 OVGTGTLMAVK OVGTGTLMAVK 1250	1320 GSVAHLLSKYGAFKESVVINYTE 	390 FOGOLLGTIAFMAPE FOGOLLGTIAFMAPE 390	1460 SIPSHLSPGLRDVALRC
0 67	740 MQELLGRLCL WQELLGRLCL 740	810 SARMVTTVPH SARMVTTVPH 810	880 LPPTTIWKPORTVPL LPPTTIWKPORTVPL 880	950 950 90CLNSSPLSHHSC 90CLNSSPLSHHSC 950 960	103 WEDSDKLSPVF WEDSDKLSPVF	1100 SDETVFTPVEE SDETVFTPVEE	MEAE	1240 GAFSSCYQAQI GAFSSCYQAQI 1240	1310 JEISWMAGGSVAHI SFIEWMAGGSVAHI	380 LASKGTGAGEF LASKGTGAGEF 380	TTAP
50 66	730 CILGNQTESNNWQE 	800 VGKLSRRIYLS VGKLSRRIYLS	870 NSFCRHLFPTT NSFCRHLFPTT 870	940 PMVQTKGRPHSQCLNSSP: 	8 - 8 10 0 - 10 0 0 - 10 0	SSNSSNCCYTE SSNSSNCCYTE 1 1090	1160 DVNHNQKCKEH DVNHNQKCKEH 1160	1230 EWLKGQQIGL EWLKGQQIGL	1300 CEKSNYNLFI CEKSNYNLFI 1300	370 IADFGAAARL IADFGAAARL 370	1450 LALIFKIASA LALIFKIASA 1450
ý					01					H H	

1520 1540 KKLVGNHIDIYGHDATEQLXTRPVGNPYLSMXL

Results file 6168950 x_697898 .res made by spaula on Thu 20 Feb 103 16:41:37-PST. Results of the initial comparison of US-09-359-756-1 (1-4693) with: File : US09697698mcd.pep 20 Standard Deviation 0.00 Total Elapsed 00:00:00:00 Query sequence being compared:US-09-359-756-1 (1-4693) Number of sequences searched: Number of scores above cutoff: Joining penalty Window size SEARCH STATISTICS FastDB - Fast Pairwise Comparison of Sequences Release 5.4 Median 0 K-tuple PARAMETERS CPU 00:00:00.00 Unitary 6 1.00 0.05 0 Mean 9 Similarity matrix Translation Frame Mismatch penalty Gap penalty Gup size penalty Cutoff score Randomization group Scores: 100-Times: SCORE OMODMNOMO NDMMR OF

The scores below are sorted by initial score. Significance is calculated based on initial score.

1495

Number of residues: Number of sequences searched: Number of scores above cutoff: A 100% identical sequence to the query sequence was not found.

The list of best scores is:

	g : 63					ω >	ı Eri			Д	D ₁ OC	
	00.0	0.00 911 0	50 60 SWEWTSCLSSRSLPPHRRPP DWRRQLRKVRSVELDQLPEQ 40 50	120 RVPQRP GASSPAAA 120	190 GWKGEIGEGLWWX AWKHEWLERRNRR 180	260 SPPOCLFRVAE SSP-GVRRKRV 250	AVHMEHS- AVHMEHS- QOIGPNSE	390 PSRSLFHA KTLKNF	450 SCTTTACQFGQKSVEB STSTSSENSIKDEEEGMC 410 420	HEGI	; EL	630 SVLTLSTKC-
Opt.	263	ance =	60 TLSSRSSL - RKVRSVE	RTAAP SVAAPDSC	CNGWKGE1 	ള് — പ്	35 LLGLRTA H RARLYLL(300	380 GVAQGSKLHLVTPSRSL FQLEPSDPWLWRKTLKN 350	TACQFGQI SSSENSII	S YSSSL YSHELSS	S7C GVFPN GVFGN	620 AFCQWSV
Init.	6	Significanc Mismatches	SO 60 CAKCGVWSWISCLSSRSSLPPHRRP 	110 PTLPSRWRRRTAA. SRRGAHLTESVAA 00	18(PVCQPGST ATCMP	250 OXNONLOED PGNSPSGR	320 QTINTGC: RRVNKVM 290	380 TVGVAQG -VFQLEP 350	450 AGTSCTT	500 ELHSSKP KWRSHDF	560 -FLETGMXERWPS: PPAYKDLAEPW-I	IMWWRHAA
	Dengen S 1495	9697898 263 8 359 N utions	CAKC - RA	100 PAGAA PHGAA	170 SGRNXRQI MIREKLKJ	240 TPHQVAQ: SPSP	310 TLSKLEETAQTINTGCLLGLRTAAVHMEHS	370 SRILRLRVCSRNITVGVAGGSKLHLVTPSRSL 	440 -LQCVKTAAGTSCTTTACQFGQKSVE FWSNSHTLSSSSTSTSSSENSIKDE 400 420	490 500 OVLWIPLLPSELHSSKPY. LEPLICPLCRSKWRSHDFY. 470 480	FLET GTQQIPPAYK 530	600 -PPVGLPRPVSQEMWWRHAAAFCQWS'
	cation UR	tion US/09 core = e Substitu	X 10 RALROAAREEPSRRAARARIPRDCCGRRAAGAASGRTGGGGGS RAGGGGALKASSARAAAGILRBAGSGGRE X 10 20	90 PASSLWRCRRPTEP 	140 150 160 190 190 SELLORPPPUVRWRIKKLSKGCTRMMIVQRNEXSGRNKRQPVCQPGSTNGWKGEIGEGLWWX AEPSPAAAAAGREMENKETLKGLHKGLHKDDRPEERMIREKLKATCMPAWKHEVLERRNRR 140 150 150	200 210 250 250 250 250 250 240 250 250 250 250 250 250 250 250 250 25	il Fr	60 KLXRILRL IHLL	ı (O	RRNE	э—э	600 PPVGI
	 , Appli	ica d S	30 CGRRAAGI LREAG	AAGSGTG180	SKGCTRW TILKGLHK	RLHQLPKA 	300 KCGPDCTYCSRXG 	350 360 SGCFNXNLQTQCYGEKLXR SCAHGTFC	400 410 420 430 CQILIHCHHLVLHLVQKTAXRMKRNRCVLFACWACLMKKV	480 LMISTATSC CMSIWAEEC 460	S40 S50 KIXLSHGFRCLEWN-SLAAY	
	ription Sequence 3	3, Opti Mato Jone	20 RARLPRDC AAGL	90 WRCRRP SPSPEPAL	15(VRWRIKKU GREMENKU	220 QERSRQVI AAESP(290 QTAVLTK	350 SGCFNXNLQTC SSCAHGTE	420 XRMKRNR SRRSS	470 -XYVPFVDLSGDLMI CEDGCRNKLHHHCMS 0	S40 KIXLSH	RVGE-
Ø .	Desc 1 - 1 - 1 98 - 3	1 (1-4693) 3 Sequence = 20% N	0 EPSERBA ASSARAA 20	WGPASSLY PASST	140 LORPPPV SPAAAPA	210 DLK-XITXQLSLQERS: PVKGDGSEMNHLAAES 200 210	280 MASHHIALRK FQSGRI 0	340 VFICYLXCS PDNKYRVFIGPQNCS 320	410 VLLHLVQKTAXR 	470 LTVCEDGC 440	530 LSKSLLL1 LAGS	590 GAAVEAA-
of best	Name .09-697-8	359-756- 697-898- core dentity on Frame	X 10 RALRQAABEEPSRRAARARL PEAGGGGALKASSARAAAGL X 10	70 RLPRRSPRTORGVGPASSLWRCRRP 	130 SPGRSGRPPSRL SPG-EKRAPAEP 130	O KEMDLK-> KPIPVKGI 200	0 EPLHQMA8 FQ8	PDNK 3.	HCHHLVL)	GMLDEE 0	520 RAILTLLIMELSKSLLLT 	580 CCWQMGRALEILGAAVEAA.
ne list	sequence no	1. US-09-3 US-09-6 Initial Sc Residue Ic Gaps Translatic	X RA PSPEAC	70 RLPRRRSP PLFLAASP 60	SPGRSG ——— EPG-BI	200 NOSQLKEN 	SHHPE SPVP-	LIGGDS	400 CQILI	- IENE 	52 RAI RAAQQ S00	580 CCWQ!v

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PĖKAENDDTYKDDVM-----HNOKCKEKMEAEBEBEALAIAMANSASQVALPIVPQLQVĖ---NGEDIIIIQ
1150
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LMA-----VKQVTYVRNTSSEQEEVVBALREEIRMMSHLNH----PNIIRMLGATCEKSNYNLFIEWMAGGSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1110 1120 1130 1130 1140 1150 1150 1160 1150 1160 INDXNSIQSSTPVLRTFLRHLCLQVIQQXLLSQKLLKRLKRLKRLKRMKLKK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---KFİLÇPHRNCPENKDSDKLSPVFTQ---İRPLPSKNIHRPKPSRPTPGNTSKQGDPSKNSMTLDINSSS
1010 1020 1030 1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1170 1180 1190 1200
K-----KAXOLPWQC---QRLRXPSPXFLSGRL--KMEKISSLFNRIHQRLYQDIP-------KQNNR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KCDDSFGLSSNSSNČCYTSDETVFTPVEEKČRLDVNTELNŠS----IEDLLEASMPSSDTTVTFKSEVAVLS
1080 1130 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0 1230 1240 1250 1260 1270 1270 1270 1270 IERTLN----GXKVNRXALEHFLLVIRLKMHELKMLINRXLMKSETHLLSKKKKXKKKKKKKKKKKKKKKK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            290 1300 1310 1310 1320 1330 1340 1350
TSLGCWEPRVRRAITISSLNGWGGDRWLICXVNMEPSKNQXLLTTLNGYSVDFRISMKIKSFTEMSKVPICX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ----SCYQAQDVGTGT
1240 1250
                                                                                                                                                                        DPVXKVYVAALKTILRAMLVYTPC--HSLA------BRIKLQRLLQB----VVDTI--LVKC-----A30 640 650
                                                                                                                                                                                                                                                                              700 710 720 730 740 750 750 750 750 750 750 750 750 750
                                                                                                                                                                                                                                                                                                                                                                       190 810 820
LMFHKLSLLKSGIRSÇCPSXPLLCSPLIPTQWLANF--PBGSŢXVLQBWLLQYPMCFQNCXKCXVFPVFPL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ------BIRYK--KLLSLITFALOSIDNSHSMVÖKLSRRIYLSSARMVTTVPHVFS--KLLEMLSV
770 780 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              00 910 920 920 930 940 950 960 960 DONXVPVQRTFERDWPGPQXPTPLLYLLIPNXCF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    970 980 1030 1000 1010 1020 1030
QPCQPLLLLPHL.-YQLALQQMSLSIDFRDSFPAEXTLHLKHSASFLYNSTETVLKTKTGINFPQSLLSQD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1040 1050 1060 1060 1070 1080 1090 1000 pcppytytggsy-lddppQvIQVNREIPQXIAXHLIXTVVPNY--MTALAXAAIVVIAVIP-VTRQCSPQXRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PKÞWYGTKĠRPHSQCLNSSPLSHHSGLMFPÅLSTPSSSTPSYPAGTÅTDVSKHRLQGFÍPCRIPSAŠPÓTQŘ
940 950 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0 840 850 860 870 870 880 890 TSPGCVAVXWLMQWRWKLPKPSSWAXKTLYNDNNTTAFAGICS--QQLSGNHREQFPLSAQSIXRKLFXDYV
NWNVREWALRRLSHDVSCALLLANGESTGNSGGSSGSSPSGGATSGSSQTSISGDVVEAC-CSVV--LSMVCA
S60 570 570 620
                                                                                            640 650 670 670 690 ------TLLLXXHXEEPCWYILLATVXRKESNPRDFSSQLXTFSXSNVQMP,AAQVSCPYQHCWNCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   --sovsthftrmkrrlmayadevelabaiolgvedtlgröchn---sfcrhlept-----
830
840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QDTPETLPGHTKA-----KOPYR-----BDTEWLKGOQIGLGAFS-----
1210
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> 0 < 0 | 0 IntelliGenetics > 0 <

0.	1490 XSIQS XLRIAD 1370	1560 KAQTSA - KPPWNA	
1310	HOESY STGOF	15 KAQYAKA MA-CAKP	
1300	1480 VXNFNLRTDLE VKGANLLID-E 1360	1550 CDXQIMICT: WSVGCAIIEI	
1290	1470 LLVYEMWLFVV HENQIIHRDV 1350	1540 RGQWGTLTXV 9QYGRSCDV 1410	QDRPPSRELL 1480
1280	20 1430 1440 1450 1460 1470 1480 1490 AVLLXKWLVQNHHGMQXRTPILLXXLRLLVQLILHRSLHICLLVYEMWLFVVXNFNLRTDLHQESXXSIQS	1500 1510 1550 1560 1570 1580 1580 1580 1580 1580 1580 1580 158	X ET EKKSNHLALIFKIASATTAPSIPSHLSPGLRDVALRCLELQPQDRPPSRELL 1440 1450 1450 1460
	1450 YLRLLVQL NYTEQL	1520 WGTTLIST I	ILSPGLRDV
1270	1440 ONTPIILLX ESVVI	1510 CODAQOEKKNI CODAQOEKKNI 1390 1390	TAPSIPSHLS
1260	1430 VQNHHGMQE 	1500 QLYRSTTXKQI QLYRSTTXKQI RLASKGTGAGI 1380	LIFKIASAT 1450
	1420 AVLLXKWL AV AHLLSK 1320	15 FVLHGSQL: F-GAAARL, 13:	X ET

```
Results file 6168950 \times 697898.res made by spaula on Thu 20 Feb 103 16:41:55-PST.
                                                                                                              Results of the initial comparison of US-09-359-756-1 (1-4693) with: File : US09697898mod.pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Standard Deviation 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total Elapsed
                                                                   Query sequence being compared:US-09-359-756-1 (1-4693)
Number of sequences searched:
Number of scores above cutoff:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Joining penalty
Window size
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEARCH STATISTICS
FastDB - Fast Pairwise Comparison of Sequences Release 5.4
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1
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00:00:00
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6
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0.05
0
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Number of sequences searched:
Number of scores above cutoff:
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10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity matrix
Translation Frame
Mismatch penalty
Gap penalty
Gap size penalty
Cutoff score
Randomization group
                                                                                                                                                    100-
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                                                                                                                                                                                                                                                                                                                                                                                                    SCORE
                                                                                                                                                                                                                                                     O Du
                                                                                                                                                                                                                                                                                      SHOPHRUMO
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A 100% identical sequence to the query sequence was not found.

The scores below are sorted by initial score. Significance is calculated based on initial score.

---SGALLLANGESTGNSGGSSGSSPSG-G

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IQVFGMELVGCLFSRNWNVREMALRR----LSHDV---
                                                                                                   Sig. Frame
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S90 600 610 620 630 640 650
KFWGQQWKQPEWGŞHQWVFPDQYI,RRCGGGMI,QRSVNGLCXPCLQSVRCCFKNIES--HAGIYSLPQFSGKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    330 340 350 350 350 370 370 380 LQLCTWNILYSSAI-CDAPGVSTRF-RPNVMSKNFKF-XGXEFV-----PFIS----QXAXLKDQSSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         270 280 290 300 320 320 HTTPKSPFTRWLLTIXPXGNKPPCXQSDAGQTVLTAAADRAXLFPD------WRRQPRQXIPGVYWASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TVKSESPGVR-----RKRVSPVPFQS----GRITPPRRA-PSPDGFSPVSPEETNRR-----VNKVMRA-R
250 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              390 440 410 420 430 440 XHHPEVCFTHVK-----FSYIVIXYFYIXFRKQHKGXRGTDVSYLLVGHAXXRKSYSVXRRLQEQAAP---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             --NPEVESLFOKYHSRRSSRÍKAPSRNTÍ----ÓKFVSRMSNSHTÍSSSSTSTSSSENSIKDEEBÖMCPICL
370 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    450 460 510
-----PLHV-NLGRRVXKKKRTFNMSPLXIXVEISKFLQPRVVKSGGFPFFPQSGTAANRTAAAFGWITK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LGMLDEBSLTVCEDGCR--NKLHHHCMS---IWAE-------ECRRNREPLICPLCRSKWRSHDFYSH
430 440 470 450 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              520 530 540 550 560 570 580
E-SREQFXPYSLWNSANPSCLQRFSXAMDSGVWNGTRWLLIFXKLECERDGPQASFPXCQWGPAVGKWGEHW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ELSSPVDSPSŚŁ-RAAQQQTVQQQPLA-----ĠSR-RNQESNFNLTHYGTQ-----GIPPAYKDLAEPW
490 510 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         140 150 150 160 170 190 190 SG---PRRSXDGEXR----NSQRVAQDGXSSRGTWDQGETEGNL---YASLEARM-VGKEXXARACGGKTN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200 210 220 240 240 PSXRRWIXNESLSSXVSRRGPGKCGFTSFQRPTQSFSWQLPIRSHSEIRIS----RSKEKKSFPSAFSEWQN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      --RKVRSVELDQLPEQPLFLAASPPASSTSPSPEPADAAGSGTGFQPVAVPPPHGAASRRGAHLTESVAAPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SGASSPAAAEPGEKRAPAAEPSPAAAPAG----REMENKETLKGLHKMDDRPEERMIREKLKATCMPAWKHE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WLERR------NRRGP-VVVKPIPVKGDGSEMNHLAAESPGEVQASAASPASKGRRSPSGGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LYLLQQIGBNŠFLIGGDSPDNKYRVFIGPQNCSCAHGTPCIHLLFVMLRVFQLEPSDPMLMRKTLK-----
300 310 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10 50 60 70
EPXGRRRRRSPQGEQRARGCRGTAAGGGQRGPRAGGLAAAAAQSAECGAGPAAXAAALFCRLTAGLLDFPV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGARGRSGEWDRLP--ACGGAAAP--RSRQPARRPPYRVGGGAG-QRRLESRSGRA---RGEAGARRRAVSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PSPE-----AGGGGALKASSARAAAGLLREAGSGGRERADWRRRQL-----
                                                                                                                                                                                                                                                                                                                                                                           10 Optimized Score = 263 Significance = 0.00
21% Matches = 374 Mismatches = 846
559 Conservative Substitutions = 0
                                                                     Init. Opt.
Length Score Score
                                                                                                                                                                     263
                                                                                                                                                                         10
                                                                                                                                                                 1495
                                                                                                                                                                                                                                                                 1. US-09-359-756-1 (1-4693)
US-09-697-898-3 Sequence 3, Application US/09697898
                                                                                                                                                              1. US-09-697-898-3 Sequence 3, Application US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100
                                                                                                      Description
The list of best scores is:
                                                                                                                                                                                                                                                                                                                                                                           Initial Score = Residue Identity =
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                                                                                                      Sequence Name
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-VEIAÈAIÒ-----TIIWKPORTVP----LORÒCHNSPCRHÙ-----FP---TIIWKPORTVP----L
850
850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1850 990 1000 1010 1020 1030 1040 1050
HCNRCLXAXTSGIHSLQNIFCISSNIAQVESTIPQĶĻŞKKQRLRXIFPŞLYSVKTĻĀLQXHTQAKAJŞTYPR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1060 1070 1080 1090 1100 1110 1120 XXKXTGRŞLKKKHDŢXSEÇXRAQĻQYXQEMLEQQXXXXLLLYQXRDŞVHEŞRGEMQIRCQYRAQĻQYXGPÇXSIY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1130 1140 1150 1160 1170 1180 1190
AFKXYNSNFXVRSCCPVSXKGXKXXXLQRXCESXSKVQREDGSXRRRSFSNCHGNVSV5GSPPHSSSAAGAX,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FSLQFHRNCPENKÖSDKLSPVFT-----QŠRPLÞSŠNIHRPKPŠRPTPĠNTSKQGDPSKNSMTLĎĹN
010 1020 1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SSSKCDDSFGLSNSSNCCYTSDETVFTPVE-EKCRLDV-----NTELNS-------SIEDLLE
1070 1080 1090 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1330 1340 1380 1380 1380 1380 1380 1380 1380XLHXTVTPWTFY---SPXK-------PNHSGRCQRCQFANXQHWSETKNCRFWSCSGYGYGIKRNWC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ASMPSSDTTVTFKSEVAVLSPEKAENDDTYKDDVNHNOKCKEKMEÄ--EEBEALAIANAMÄASÖVALPIVPO
1130 1130 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VDXVLNCILGNOTESNNWOELLGRLCLIDRILLERPABFY--PHIVSTDVSQAEPVEIRXKKLLSLLFALQ
720 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          910 920 930 940 950 950 970
RGHFXETGQDFGRIFXFNNNNNNNNNNNNNATKAGTPQSVFELLSFISSFPINVSSLVNPFFFYPICTSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1390 1400 1410 1420 1430 1440 1450 RRV----SGTITGDNCIYGTXGTXRRSTVWKELXCMECWLCYYRNGLCKTTMECRKTLQSSCFDIXDCXCNY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LQVENGEDIIIIQQDTPETLPGHTKAKQPYRE---DTEWLKGQQIGL------GAFSSC-----Y
660 670 680 590 700 710 720 QYSETSPASCRHHPSQMCRCQXPHKSAVHINTVGTVQRPSRRVGSWQRNJKSWIHWYWWCXLCLKLYSWKPN
                                                                                       ATSGSSQTSISGDVVEAC---CSVLSMV-----CADPVYKYVAALKTLRAMLVYTPC-----HBLAE
600 610 620
                                                                                                                                                                                                                         XIKQLARTSWPPLSYRXTVVGISCXIL-----SSYCQYXCFT-SXACXNQVXEAAVPLNLCFA----VH
                                                                                                                                                                                                                                                                                         RIK-LORLLOP-----VV---DTILVKCADANSRTSQLSISTLLELCKGQAGELAVGREILKAGSIGIGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840 850 860 800 900 SPPDGLCRXGGNCRSHPVGRRRHFITTTQQLLQASVPNNYLETTENGSPXVHSPFRENWKRIMCYKIECQF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               790 820 830
XXFPLN---GWQT----FQXDL------LEFCKNGYYSTPCVFKTVRNAE----CFQCFHSLHQDA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1200 1210 1220 1230 1240 1250
WRRYHHYSTGYTRDSTRTYQSKTTVXRRHXMAERŞTDRPWŞIFFLLSGŞR.-CGWWNFNG-----CXŢGPĻ-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BCTVHLEKTGKG---LCAT---------KLS------ASSEDISERLA-----RISVGP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1160
                                                                                                                                                                                             740
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42:08-PST.

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		Feb 103		(1-4693)												,	1.5
		on Thu 20	3)	-756-1													
	_ω		(1-4693) 1 1	US-09-359-756-1													
	Sequences	by spaula	compared:US-09-359-756-1 searched: re cutoff:														
		s made	-09-359	comparison of pep									•				
	Comparison of	7898.re	<pre>mpared:US trched: cutoff:</pre>	ial com mod.pep													w
s U	Pairwise Co	6168950_x_697898.res	ing compared es searched: above cutoff	of the initial com: : US09697898mod.pep													4
IntelliGenetics			nce bein equences cores al	is of ti						٠							-0
	B - Fast se 5.4	ts file	Query sequence being Number of sequences s Number of scores abov	Results File :	100-		-05	()	1 1	ı	10-	1 1	ر ا با			, (
0 0 0 0 0 1	FastDB - Release	Results	Query Numbe Numbe		10	Z		Σm	ык		 	ຜ	шО	וכו	926	O Ы	S D SCORE STDEV

1495 1 Number of residues: Number of sequences searched: Number of scores above cutoff:

20

Joining penalty Window size

0.00

Similarity matrix Translation Frame Mismatch penalty Gap penalty Gap size penalty Cutoff score Randomization group

K-tuple

Unitary 6

PARAMETERS

Standard Deviation 0.00

SEARCH STATISTICS Median 0 Total Elapsed 00:00:00.00

CPU 00:00:00:00

Mean 17

Scores:

Times:

The scores below are sorted by initial score. Significance is calculated based on initial score.

A 100% identical sequence to the query sequence was not found.

Results file 6168950_x_697898.res made by spaula on Thu 20 Feb 103 16:42:20-PST.

FastDB - Fast Pairwise Comparison of Sequences Release 5.4

> 0 < olimination of | 0 intelligenetics > 0 <

The list of best scores is:

6168950 x 697898.res

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Sig. Frame
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1480 1510 1510 PPQAGSRSH-----SPLR-----PRAP----ATGK-----SRR----PAVRRQGRADAQAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GPQNCSCAHGTFCIHLLFVMLRVFQLEPSDPMLWRKTLKNFEVBSLFQKYHSRRSSRIKAPSKNTIQKFVSR
330 330 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MSNSH-TLSSSSTSTS----SSENSIKDEBEQMCPICLLGMLDEBSLTVCEDGCRNKLHHHCMSIWAEECR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGLLREAGSGGRERADWRRRQLRKV-------SOVELDQLPEQPLFLAASPPASSTSPSPERADAAGSGTG
30 40 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1220 1260 1270 1270 GLKVIVETP-GA----SQIADEYRMFHVHSCSSEAQXTPGIXCLGCLLQSGKSXALSAAVSTVWPASLCXHG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1280 1290 1340 1340 1340 1340 1340 1350 1340 1340 1340 UVRSHLVĶGLFGVVYFCHESKALGKLFFSLLLFILISLÇ--DLMGSCQEKDCVGLWKLVĶP-HL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -AAÞAGREMENKETLKGL------HKYDDRPEERMIRÈKÍKATCMPAWKHEWLÈRRNRRGPVYVKÞIPV
140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1350 1360 1370 1380 1390 1400 PGPLLETQLLSDSFOIHLLXLGLVLPPQALAYFSFPTIRASRLAYRLPS-------VSPXSFVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KÖDGSEMNHL-----AAESPĞEV---ÖASAASPASKGRRSPSPGNSPĞGRTVKSESPGVRRKRVSPVPFOS
200 240 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1410 1420 1430 1440 1450 1460 1470 LDDHPSCATLXEFLYSPSHDRRGP-LQETARRRAPASPRARPLRDSRRRCPAPPPTRXGGRRAGMRLRGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GRITĖ-----PRRAPSPGFSPYSPEETNÄRVNKVMÄÄR-LYLLQQIGĖ--NSFLIGGDSPDNKYR-VFI
270 280 320
                                                                                                                                                                                                                                                                                                                                                                               1080 1090 1100 1110 1120 X 1130 1140 NPQDLTTRGCRNHEISTXIYKGDILKVLYFFYTLLPKLTCSGGAACSCSRLHTLXDFLHQACPTSKXDTSVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                             PSPEAGGGGGLKAS--SARAA
X 10 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FQPVAVPPPHGAASRRGAHLTESVAAPDSGASSPAAEP-----GEKRAPAEPS---PA-----
90 110 110
                                                                              0.00
                                                                                                                                                                                                                                    Optimized Score = 69 Significance = 0.00
Matches = 98 Mismatches = 277
Conservative Substitutions = 0
Init. Opt.
Length Score Score
                                                                              17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1520 1530 1540 1550 XGLIRRRLPPG
GPAPHSALCAAAAASPPARGPRCPPPAAVPRQPRARGSPXGLIRRRLPPG
                                                                              1495
                                                                                                                                                         1. US-09-359-756-1 (1-4693)
US-09-697-898-3 Sequence 3, Application US/09697898
                                                                           1. US-09-697-898-3 Sequence 3, Application US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RNREPLICPLCRSKWRSHDFYSHELSSPV
470 480 490
                          Description
                                                                                                                                                                                                                                             17
198
130
                                                                                                                                                                                                                                          Initial Score
Residue Identity =
Gaps =
Translation Frame=
                          Sequence Name
```

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Results of the initial comparison of US-09-359-756-1 (1-4693) with: File : US09697898mod.pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Standard Deviation 0.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total Elapsed 00:00:00:00
Query sequence being compared:US-09-359-756-1 (1-4693)
Number of sequences searched:
Number of scores above cutoff:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Joining penalty
Window size
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The scores below are sorted by initial score. Significance is calculated based on initial score.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEARCH STATISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Median
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               K-tuple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1495
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PARAMETERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CPU
00:00:00.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unitary
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mean
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Number of residues:
Number of sequences searched:
Number of scores above cutoff:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity matrix
Translation Frame
Mismatch penalty
Gap penalty
Gap size penalty
Cutoff score
Randomization group
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Times:
```

A 100% identical sequence to the query sequence was not found

Results file 6168950_x_697898.res made by spaula on Thu 20 Feb 103 16:42:29-PST.

FastDB - Fast Pairwise Comparison of Sequences Release 5.4

IntelliGenetics

<u>0</u>00

The list of best scores is:

Thu Feb 20 17:09:04 2003

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Init. Opt.
Length Score Score Sig. Frame
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1340 1350 1360 1370 1380 1390 1390 RRRTASAFGSWXSRTCLDLS--WRLSCXVIHFRSISFNWDWFYHHR-PSP-ISPROPFY---LPGWHTGCLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1400 1410 1420 1430 1440 1450 1460 ELPDHSFLWTIHLVQPFESFFILHLTTGGGRCRRRLGGGRPLLPGLGCGTRGAAVRRRHRLGK--VGAAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1470 1480 1490 1500 1510 1520 1530
AGGS - VGRRHRHRLEAGPTPRCVRGIRRRGSRGGRRXGGKESRLLRQUVQLHTPHFAQLPPPVRPLAAPA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ONCSCAHÖTFCIHLL---FVMLRVFQLEPSDPMLWÄKTLKNFE--VESLFÖKYHSRRSSRIKAPSR----N
330 340 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TIQKFVSRMS--NSHTLSSSSTSTSSSENSIKDEBEQMCPICLLGMLDBESLTVCEDGCRNXLHHHCMSIWA
390 440 450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RRNRRGPVVVKPI PVKGDGSEMNHÍJAAESPGEVQAŠAASPASKGRŘSPŠPGNŠPSGRTVKSESPGVRKKRVS
190 240 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   --SSÁRAÀAAGLĹ----REÁGSGGŘEŘADWŘRRŶ------LRKÝRSVELĎ------QLPBÓPLFĽA
20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ASPPASSTSP-----SPE-----PADAAGSGTGFOPV-AVPPPHGAASRGAHLTESVAAP
70 90 100 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DSGASSPAAAEPGEKRAPAAEPSPAAAPAGREMENKETIKGLHKNDDRPEERMIREKLKATCMPAWKHEWLE
120 130 130 140 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PVÞFQŠGRIT-PPRRAPSPDGFSPYSPEETNR--RVNKVMRARÍKLLQQIGPNSFLIGGDSPDNKKRVFIGÞ
260 300 310
                                                                                                                                                                                                                                                                                                                                                                                                                                   1060 1070 1080 1090 1100 1110 1110 1120 1130 1130 1LYGLLLCSSEGRRGIHRIXQLVAVEINRSPLRSTRGTYXRFSISSTLFCPNXHAVVVQLVPAAVFTHCKTF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1210 1260 1240 1250 1260 1250 1250 1260 -- KILXSFSFYHWYXRFXLKHPEHHKXQMYTECSMCTAAVLRPWKHPYFIVWAVSSNQERVRPYLLQXV---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .270 1280 1290 1300 1330 1330 1320 1330 0.05GPHHFVNTAVCFLRAIWXEASSG--WCDSATLK-RHWGNSFSPYSWRFXFHCAT---XWGVA---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1140 1150 1160 1170 1180 1190 FIKHAQQANRTHLFLFILYAVFKTRÇR-STRXXQCMRIXHAXNKLLDGYTRWSFDFXATFTVIFLEGTLNU.
                                                                                                                                                                                                                                                                            Optimized Score = 66 Significance = 0.00 Matches = 93 Mismatches = 293 Conservative Substitutions = 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PSPEAGGGGGALKA
X
                                                                                       1495
                                                                                                                                                                                 1. US-09-359-756-1 (1-4693)
US-09-697-898-3 Sequence 3, Application US/09697898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1540 1550 ARLPQQSRGSRARAARLEGSS------AAAÇLRA
                                                                   1. US-09-697-898-3 Sequence 3, Application US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EECRRNREPLICPLCRSKWRSHD
                                                                                                                                                                                                                                                                               118
0 % 61
13 % 9
                                                                                                                                                                                                                                                                               Initial Score = Residue Identity =
                                                                                                                                                                                                                                                                                                                                        Gaps
Translation Frame=
                                 Sequence Name
```

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Results of the initial comparison of US-09-359-756-1 (1-4693) with: File : US09697898mod.pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Standard Deviation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A 100% identical sequence to the query sequence was not found.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total Elapsed 00:00:00:00
                                                                                                                                                                                                                                                                                                                                                                                                 12
Query sequence being compared:US-09-359-756-1 (1-4693)
Number of sequences searched:
Number of scores above cutoff:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Joining penalty
Window size
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The scores below are sorted by initial score. Significance is calculated based on initial score.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEARCH STATISTICS
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0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    K-tuple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1495
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PARAMETERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CPU
00:00:00.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unitary
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mean
15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Number of residues:
Number of sequences searched:
Number of scores above cutoff:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity matrix
Translation Frame
Mismatch penalty
Gap penalty
Gap size penalty
Cutoff score
Randomization group
                                                                                                 100-
                                                                                                                                                                                                                       OF
                                                                                                                                                                                                                                                              SECENTION
```

The list of best scores is:

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Init. Opt.
Length Score Score Sig. Frame
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1380 1390 1400 1410 1420 1420 1430 PREFLESINGCPOAGIQVAFSFSELIRSSGR---SSILCNPLRVS--LFSISR---PAGAAAGDGSAAGAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1440 1490 1450 1450 1460 1470 1480 1490 FSPGS------AAAGL-----EAPLS-GAATDSVRWAPRALAAPWGGGTATGWKPVPLPAASAGSGD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FSPYSPEETNRRVNKVMRÅRLYLLQOIGÞNSFLIGGDSPDNKYÅVFIGÞQNCSCAHGTFCIHL--LFVMLRV
280 330 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1500 1510 1520 1530 1540 1550 1560 GEVEEAGGEAARKSGGSGSWSSSTLRTLRSCRR--RQSARSR--PPLPASRSSPAAARALLALRAPPPPA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FOLEPSDPMLWRXTLKNFEVES -- LPQKXHSRSSRIKAPSRNJIQKFVSRMS -----NSHTLSSSSTSTS
350 360 360 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -KASSARARAAGLIREAĞĞGĞRERADWRRRQLRKVRSVELDÖLPEĞPLFLAASPPASSTSPSPEPADAAĞSG
20 30 40 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1320 1330 1340 1350 1370 LFLLTPGDSDFTVRPDGELPGGGL----FTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1130 1140 1150 1160 1170 X 1180 1190 PSSHTVRLSSSSSWPNKQIGHICSSSSFMLFSELDVEVLDDDNVXBFDMRETNFMAVLRDGALILELRLLXYF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1200 1210 1220 1220 1260 MNKLSTSKFFKVFLHNIGSEGSSXNTRSITNSRXIQNVPCAQL--QFXGPINTRYLLS-GLSPPIRKELG--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PGEVQASAASPASKG---RKSPSPONSPSGRTVKSESPGVRRKRVSPVPPQSGRTTPPRAPSPDG-----
220 230 240 250 250 260 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGFQPVAVPPPHGASRRGAHLTESVAAPDSGASSPAAAEPGEKRAPAAEPSPAAAPAG-----REMENKET
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PSPEAGGGGÄL------X
X
                                                                                 0.00
                                                                                                                                                                                                                         15 Optimized Score = 71 Significance = 0.00
21% Matches = 98 Mismatches = 249
109 Conservative Substitutions = 0
6
                                                                                 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SSENSIKDEEEQMCPICLLGMLDEESLTVCEDGCRNKLHHHCMSIWAEECRR
X 420 450 460
                                                                              1495
                                                                                                                                                   1. US-09-359-756-1 (1-4693)
US-09-697-898-3 Sequence 3, Application US/09697898
                                                                     1. US-09-697-898-3 Sequence 3, Application US
                             Description
                                                                                                                                                                                                                                        Initial Score
Residue Identity =
Gaps =
Translation Frame=
                       Sequence Name
```